

REMARKS

Interview Summary

Applicants thank the Examiner for the courtesy of the June 4, 2007 telephone interview regarding the restriction requirement. During the phone call, applicants' agent pointed out to the Examiner that the Examiner's groups in the restriction requirement did not encompass all of the claimed subject matter. The Examiner responded that the following are also included in Group I:

- Compounds of formula I wherein R⁴ is an optionally substituted C₁₋₆aliphatic;
- Compounds of formula I wherein R⁴ is -(U)Cy³;
- Compounds of formula I wherein R⁴ is -(U)Ar³; wherein j is 1

The Examiner further clarified that the following is included in Group II (under the term "aromatic" in the restriction requirement):

- Compounds of formula I wherein R⁴ is -(U)Ar³; wherein j is 0 and Ar³ is an optionally substituted aryl group selected from a 3-8 membered monocyclic or an 8-10 membered bicyclic ring having 0-5 heteroatoms independently selected from nitrogen, oxygen, or sulfur; wherein Ar³ is not one of the groups already recited by the Examiner in the restriction requirement, namely "phenyl," "pyrazine, pyrimidine, or pyridazine," and "quinazoline."

The Claim Amendments

Restriction Requirement

Applicants have amended claims 1, 22-25, 28, 43-44, 51 and 52 in accordance with the response to the restriction requirement. Applicants have withdrawn rather than cancelled claims 55-63 to preserve the option of rejoining these claims. Applicants reserve the right to pursue any unelected subject matter in continuing applications claiming priority herefrom.

Voluntary Amendments

Applicants have amended claim 1 to add the variable "y" to recite the number of occurrences of Z-R^y. Support for this amendment may be found in the specification as originally filed (see e.g., page 17, paragraph [0052] to page 20, paragraph [0058], disclosing the variable y, which indicates the number of occurrences of Z-R^y in the compounds of formula I).

Applicants have amended claim 1 to remove the period at the end of sections "d)" "e)" and "f)."

Applicants have amended claims 22 and 23 to correct inadvertent typographical errors. Applicants have amended the definition of X as "OR⁴ⁿ" to "O." Applicants have also amended the definition of X as "SR⁴ⁿ" to "S." Support for these amendments may be found in the specification as originally filed (see e.g., the definition of X on page 10, which defines X as a valence bond, O, S, or NR).

These amendments add no new matter.

The Restriction Requirement

The Examiner has required restriction of the claims in this application under 35 U.S.C. § 121 to one of the following eight groups:

- I. The compounds and compositions according to Claims 1 (in part), 2-23, 24-25 (in part), 26-27, 28 (in part), 29-42, 43-44 (in part), 45-50, 51-52 (in part), and 53-54 of formula I, wherein R⁴ is H, absent, an optionally substituted C₁₋₆aliphatic; -(U)Cy³, wherein j is 0 or 1; or -U-Ar³.
- II. The compounds and compositions of formula I, wherein R⁴ is aromatic or phenyl.
- III. The compounds and compositions of formula I, wherein R⁴ is pyrazine, pyrimidine or pyridazine.
- IV. The compounds and compositions of formula I, wherein R⁴ is quinazoline.
- V. The methods of treating according to claims 55-63, wherein R⁴ is H, absent, an optionally substituted C₁₋₆aliphatic; -(U)Cy³, wherein j is 0 or 1; or -U-Ar³.

- VI. The methods of treating according to claims 55-63, wherein R⁴ is aromatic or phenyl.
- VII. The methods of treating according to claims 55-63, wherein R⁴ is pyrazine, pyrimidine or pyridazine.
- VIII. The methods of treating according to claims 55-63, R⁴ is quinazoline.

Applicants elect for further prosecution, Group I (Claims 1 (in part), 2-23, 24-25 (in part), 26-27, 28 (in part), 29-42, 43-44 (in part), 45-50, 51-52 (in part), and 53-54)) drawn to the compounds and compositions according to formula I, wherein R⁴ is H, absent, an optionally substituted C₁₋₆aliphatic; -(U)_jCy³, wherein j is 0 or 1; or -U-Ar³.

The Examiner has also required a species election. Applicants respectfully submit that applicants have already elected a species in the April 27, 2007 response to the restriction requirement mailed on March 27, 2006. In that response, applicants elected compounds I-2 (see page 30, paragraph [0099]) without traverse.

Conclusion

Applicants request that the Examiner enter the above amendments, consider the above remarks, and allow the pending claims to issue.

Respectfully submitted,

/Jennifer Che/
Jennifer G. Che (Reg. No. 58,035)
Agent for Applicants
Lisa A. Dixon (Reg. No. 40,995)
Attorney for Applicants
Vertex Pharmaceuticals Incorporated
130 Waverly Street
Cambridge, MA 02139-4242
Tel.: (617)444-6525
Fax.: (617)444-6483
Customer Number: 27916